#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018528 Address: 333 Burma Road **Date Inspected:** 07-Dec-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component: OBG** Segment

**Summary of Items Observed:** 

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

OBG # TRIAL ASSEMBLY YARD (12AW-12BW)

This QA Inspector along with QA inspector Mr.Manjunath S Math performed the dimensional survey inspection to verify the root gap and offset on the transverse splice weld of segment 12AW and segment 12BW. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 12AW to Segment 12BW – PP 112 to PP 113

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (11EE-12AE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 001 in the (4G) overhead position on edge and side panel piece mark no. SEG3001AA. The location was the complete joint penetration groove weld joining side and bottom panel of segment 12AE at work point E5. The welder ID was 040320. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-U4b-FCM-1.

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The QA Inspector observed the welding operation per the SMAW process on weld joint no. 006 in the (4G) overhead position on edge and side panel piece mark no. CA093. The location was the complete joint penetration groove weld joining side and bottom panel of segment 11EE at work point E5. The welder ID was 040320. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-Tc-U4b-FCM-1.

#### OBG # TRIAL ASSEMBLY YARD (12AW-12BW)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 055 in the (2F) horizontal position on bottom panel WT stiffener piece mark no. BP3019-001. The location was the hold back of WT stiffener fillet weld of segment 12AW. The welder ID was 053486. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 013 in the (2F) horizontal position on bottom panel WT stiffener piece mark no. BP3022-001. The location was the hold back of WT stiffener fillet weld of segment 12BW. The welder ID was 053486. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

#### OBG # TRIAL ASSEMBLY YARD (12AW-12BW)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 076 in the (3G) vertical position on side panel WT stiffener piece mark no. SP3048-001. The location was the complete joint penetration groove weld joining the WT stiffeners of segment 12AW and 12BW. The welder ID was 046704. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2213-B-U2-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 022 in the (3G) vertical position on bottom panel WT stiffener piece mark no. BP3020-001. The location was the complete joint penetration groove weld joining the WT stiffeners of segment 12AW and 12BW. The welder ID was 044551. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2213-B-U2-FCM-1.

For additional information please reference the pictures below:

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 238 in the (3G) vertical position on side panel WT stiffener piece mark no. SP3036-001. The location was the complete joint penetration groove weld joining the WT stiffeners of segment 12AW and 12BW. The welder ID was 041713. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2213-B-U2-FCM-1.

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## **Summary of Conversations:**

No relevant conversations were reported on this date.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Manikandan, Murugan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer